

**IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼**  
**HUMAN RESOURCES ENTERPRISE**

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**INFORMATION TECHNOLOGY SPECIALIST 5**

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**DEFINITION**

In the areas of systems management/programming, network coordination, database management, business applications programming and education, initiates/manages plans for major changes of existing systems or installation of new systems and coordinates the work with other IT functional areas; performs related work as required.

**The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.**

**WORK EXAMPLES**

Assists a supervisor by instructing employees, answering questions, distributing/balancing the workload and checking work; may make occasional suggestions on appointments, promotions, and reassignments.

Analyzes, as a project leader, the most complex and involved agency operations/procedures; studies system components and determines feasibility of adapting to automation; evaluates potential operational/procedural changes and prepares cost/time estimates for completion.

Reviews proposals for automation and develops preliminary plans; presents recommendations to customers and explains/discusses system operation, purpose, implementation and maintenance.

Directs/coordinates system development, implementation, training and maintenance activities; monitors development projects and reports on activity schedules, progress and performance; evaluates completed systems for documentation and performance.

Evaluates alternative methods of program development and makes recommendations on platforms and programming tools to be used; performs/directs the development of complex programming code.

Develops and conducts training for products and software for an individual or groups.

Analyzes system management processes (availability, change, configuration, problem, project, network and storage management, capacity planning, system performance, data modeling, charge back, service information, disaster recovery and systems security) and evaluates alternatives and potential changes.

Coordinates required system outages with customers and establishes/monitors service level agreements and system performance/availability goals.

Oversees/participates in the systems planning and procurement process; evaluates alternatives and provides hardware/software product samples; consults with customers and prepares specifications and proposals; evaluates proposals, makes recommendations and coordinates the procurement of the required hardware, software or service.

Administers multiple system management processes including the availability/allocation of system storage space, system resources (e.g., network, data, programs, and objects) and system access.

Directs/participates in the installation/upgrade of information system components (hardware/software) and develops installation plans (configuring, tuning, placing, testing and training users).

Develops training programs/plans for customers and technical staff.

Directs/participating in the performance tuning of hardware configurations, systems/application software and operational procedures.

Oversees/coordinates professional consulting activities.

Oversees/performs design and customization; interprets program specifications and develops reports, templates, programming code and spreadsheets; prepares documentation to support the use of information systems in achieving the agency mission.

Develops/documents standards, policies and procedures (e.g., customer service problem resolution, administrative functions and other system management processes) for mainframe and PC based applications.

#### **COMPETENCIES REQUIRED**

Knowledge of a broad range of current and emerging information technology including: software, operating systems, telecommunications, database, and hardware available to be applied to agency needs.

Knowledge of basic system management processes/systems, as required in designated positions.

Knowledge of data modeling methods and techniques.

Knowledge of programming languages, operating systems, or utility programs used by the employing agency, as required by the position.

Knowledge of methods and techniques of systems analysis, design and development, as required in designated positions.

Knowledge of advanced system security methods and techniques.

Knowledge of methods/tools used to troubleshoot information processing system problems and monitor system performance.

Knowledge of administrative aspects relative to planning, budget, accounting, operations management, organization structure, personnel policy and procedures.

Knowledge of accepted principles and standards of research and analysis relative to recommending, coordinating, and implementing information processing systems.

Knowledge of curriculum development, as required in designated positions.

Knowledge of information management, file structures and data representation.

Knowledge of business process analysis methods and techniques used in systems analysis, design and development.

Knowledge of regulatory requirements and compliance under the Health Insurance Portability and Accountability Act of 1996 (HIPPA) law.

Ability to create HIPPA privacy and security programs and to draft HIPPA compliant forms to ensure HIPPA compliance within an organization.

Ability to operate current information systems and peripheral equipment necessary to perform current work functions.

Ability to integrate multiple system management processes/systems, as required in designated positions.

Ability to effectively plan, organize, monitor and coordinate teams carrying out agency information processing objectives.

Ability to apply the knowledge of information technology to formulate and conduct assigned training courses for both information processing staff and customers.

Ability to apply methods/tools to solve complex information system problems.

Ability to analyze current and emerging technology to evaluate and recommend improved and potential uses.

Ability to read and interpret technical written information/instructions.

Ability to prepare and present effective written or oral information for both technical and non-technical agency staff at all levels.

Ability to integrate input from a broad range of sources to apply it to agency information processing systems.

Ability to define and implement information service standards and practices including customer service, database, system development, service levels, security, etc.

Ability to use advanced computer programming methods, techniques, and tools for application development on multiple platforms.

Ability to develop programs of the highest level of complexity.

Ability to coordinate and direct activities of others on the work project.

Ability to interact effectively with individuals at all levels of responsibility.

Ability to plan work, think conceptually, observe and evaluate trends, analyze data, draw logical conclusions and make sound decisions and recommendations.

Ability to understand customer operations, policies and procedures.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing professional service.

Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy and cooperates with supervisors.

Fosters and facilitates cooperation, pride, trust, and group identity and team spirit throughout the organization.

Exchanges information with individuals or groups effectively by listening and responding appropriately.

#### **EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS**

Graduation from an accredited four-year college or university and experience equal to three years of full-time work: operating a multi-job computer; installing, operating and coordinating computer based networks; installing/maintaining database management systems; developing business application processes; developing/operating system programs; installing/maintaining personal computers, Local Area Networks and/or servers; managing operating systems; developing/delivering information management training; providing Information Technology (IT) customer service; or designing/administering Internet sites;

OR

an equivalent combination of education and experience substituting the completion of an approved curriculum/specialized training program developed and implemented by or in cooperation with state government; or eighteen semester hours of accredited post high school course work in one of the specialty areas listed above; or certification by an authorized educational institution/major computer or software producer in an area directly related to one of the computer specialty areas listed above, for the required education;

OR

an equivalent combination of education and experience substituting one year of the required experience for thirty semester hours of the required education;

OR

employees with current continuous experience in the state executive branch that includes experience equal to six months of full-time work as an Information Technology Specialist 4.

#### **SELECTIVE CERTIFICATION**

For designated positions the appointing authority, may request those applicants possessing a minimum of twelve semester hours of education, six months of experience, or a combination of both, or a specific certificate, license, or endorsement in the following areas:

419 PC/LAN/Server	158 Other Mainframe/Midrange/Mini Operating Systems
073 SQL	958 HP OpenView
074 Email	
076 NOVEL Administration	957 Computer Education
077 NT Administration	159 PC Software
078 XENIX	160 Teaching/Training
079 LINUX	
091 CITRIX	161 Operations
413 Network Coordination	162 Data Entry
416 Multimedia Specialist	163 Print Operations
417 Business Objects	164 Tape Librarian
421 Acquisition DBA	165 Microfiche Operations
422 Data Mart DBA	166 CPU Operation (Central Processing Unit)
423 VB.Net	167 Other Peripheral Equipment Operations
122 PC Business Applications	168 Customer Support
022 Microsoft C#.Net	169 Help Desk
121 T-SQL Business Query Writing	071 Applications Support
123 Notes	170 Hardware Support
124 Power Builder	194 Customer Liaison/Advocacy
126 Visual Basic	737 Info Technology Project Management
127 C, C++	955 Business Application Processes
128 ARCVIEW	
129 DOS/WINDOWS	195 Internet
436 Javascript	196 JAVA
437 Power Designer	197 PERL
438 Visual Interdev	198 HTML
439 VBScript	
130 Mainframe Business Applications	230 Geographic Information Systems (GIS)
131 DB2	233 Data Modeling
132 ORACLE	275 HIPPA Compliance
139 Data Base	381 Microstation
320 IDMS	382 MDL (Microstation Development Language)
715 TeraData	385 GeoMedia
927 Human Resources Information System	876 Websphere 4.0
133 Programming Languages	Information Assurance
051 PHP	714 vulnerability testing
099 COBOL	716 penetration testing
134 SYNON	717 security administration
135 PL1	718 secure application development
136 SAS	719 intrusion detection
137 Other Languages	720 policy development
138 Microsoft Visual Studio	721 risk management
234 ADSO – IDMS	722 incident response
956 Systems Programming/Systems Management	723 security awareness, training and education
149 UNIX	724 privacy
152 NT	725 security audits
153 CICS	
154 MVS	726 firewalls
155 S390	727 risk assessment
156 OS400	728 physical security
157 JCL	729 business continuity/disaster recovery

Applicants wishing to be considered for such designated positions must list applicable course work, experience, certificate, license, or endorsement on the application.

Effective Date: 10/13 CH